



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,522	03/31/2004	Richard Warren Hailey	014586-9009-02	6921
1131 7590 12/11/2007 MICHAEL BEST & FRIEDRICH LLP Two Prudential Plaza 180 North Stetson Avenue, Suite 2000 CHICAGO, IL 60601			EXAMINER FABER, DAVID	
			ART UNIT 2178	PAPER NUMBER
			MAIL DATE 12/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/814,522

Applicant(s)

HAILEY ET AL.

Examiner

David Faber

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the Request for Continued Examination filed 15 October 2007.

**This office action is made Non-Final.**

2. Claims 19-45 have been cancelled by the Applicant.
3. The rejection of Claims 1-3 and 6-18, under 35 USC 101, has been withdrawn as necessitated by the amendment. The rejection of Claims 1-3, 6-9, 13-18 under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Bantz et al (US PGPub 2003/0163809, published 8/28/2003) has been withdrawn as necessitated by the amendment.
4. Claims 1-3, and 6-18 are pending. Claim 1 is an independent claim.

### ***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "370" has been used to designate composition info element, font element, field modifiers, and Field Table in FIG 22. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 374, 376, and 378. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

7. Claim 6 objected to because of the following informalities:

8. As per dependent claim 6, Claim 6 recites being dependent upon claim 5; however, claim 5 was cancelled by the Applicant, making Claim 6 not depending on any independent or dependent claim. Therefore, throughout this Office Action, Claim 6 will depend on Claim 1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 6-9, 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Bantz et al (US PGPub 2003/0163809, published 8/28/2003) in further view of Bell et al (US Patent 7,168,035, filed 6/11/2003)

As per independent Claim 1, Poole et al discloses a system:

- An assembly facility (FIG 1, 3 & 4: disclose document creation by assembling components) to apply precedence (Column 5, lines 44-61; Column 6, lines 55-63: A precedence is in place when one or more matches occur) and rules to document content (Col 5, lines 3-24; Col 7, lines 28-60: content is specified that must follow rules linked to business or governmental regulations) and configured to be coupled to an origination platform (Column 5, lines 1-24: content is specified or inputted to be included into the document originated from collecting transaction data (Column 29, lines 48-49, STEP 1)
- A knowledge base stored in computer memory and configured to be coupled to the assembly facility (FIG 3, 27, Column 3, lines 29-48)

- A content management system configured to be coupled to the knowledge base and to support authoring of document content and rules (Poole et al discloses a system spread out over three layers that stores rules, (Column 6, line 34: rules that dictate the access and utilization of components that included in the document) documents and components in the knowledge base.(Column 6, lines 17-28) These rules are used by many applications to govern the document generation that include ability to create documents, and using rules for formatting and validating. (e.g. Col 7, lines 28-60; Column 9-Column 13, line 2)

However, Poole et al discloses his invention is described within the context of an object-oriented programming implementation and that knowledge base acts as a database storing information (Column 6, lines 10-28), but fails to specify the knowledge base to store objects (content) in an object-relational hierarchy. However, Bantz et al discloses the knowledge base is organized as a database that includes being object-relational for storing data objects. (Paragraph 0039, lines 8-10)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Bantz et al's method since Bantz et al's method using database as object-relational would have allowed developers to integrate the database with their own custom data types and methods.

Furthmore, Poole et al, and Bantz et al fail to specifically disclose wherein precedence involves identifying two or more matching document components and dynamically choosing one of the matching components. However, Bell et al discloses a

selected portion of hierarchical data (document component) being compared to find a match against a plurality of shapes and/or data types, wherein each shape and/or data type is associated with a component. Once all of the matches are found, a list is displayed of suggested components that correspond to a valid match to the selected portion of the hierarchical data. Thus, the user can choose which component to be included from the list. (FIG 6; Column 10, lines 39-51; Column 12, lines 9-26)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified Poole et al, and Bantz et al's method with Bell et al's method since Bell's method would have provided the benefit of document manipulated by a designer to allow the designer to make an electronic form look and feel like the designer desires.

As per dependent Claim 2, Poole et al discloses a system:

- Wherein the assembly facility is configured to validate data received from the origination platform (Column 29, lines 47-48 discloses data being collected. Column 5, lines 3-5, discloses the develop specifies content to be included in the document to meet the rules and regulations. Thus, the data is validated at step 36, FIG 1 wherein all business, legal, and government requirements applicate to a particular entity reference are duly satisfied which produces components having integrity by virtue of being complaint with requirements (rules), Column 5, 15-24)

As per dependent Claim 3, Poole et al discloses a system:

- Wherein the assembly facility is configured to receive transaction information from the origination platform. (document creation originated from collecting transaction data (Column 29, lines 48-49, STEP 1) wherein transaction data is supplied, and then is used for generating documents that includes resolving document entitles described in Column 5, lines 14-24, Col 29, lines 47-64, and for transformations described in Column 17, lines 45-64)

As per dependent Claim 6, Poole et al discloses a system:

- Wherein the assembly facility is configured to generated a resolved, markup language file. (Column 2, lines 40-49: Discloses using the invention to create a World Wide Web page, written in SGML (Column 3, lines 47-54))

As per dependent Claim 7, Poole et al discloses the use of stylesheets, which are document formatting rules, wherein the rules are applied to resolved SGML documents (Column 11, lines 25-35) and for transforming (Column 12, lines 25-26) a SGML document into another SGML document (Column 11, lines 47-50)

However, Poole et al fails to specify the markup language file is an XML file. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transform into another document using a stylesheet. Thus, it would been obvious to one of ordinary



skill in the art at the time of Applicant's invention to have combined Poole et al's method Bantz et al, and Bell et al's method with using XML file in place of SGML since it benefit of being designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

As per dependent Claims 8 and 9, Poole et al discloses a system wherein the assembly facility is configured to operate with an interface to receive information from the origination wherein the interface is an application programming interface. (Column 9, lines 1-18: Discloses multiple layers used for receiving and sending data operated by APIs)

As per dependent Claims 13-15, Claim 13 recites similar limitations as in Claim 1 and is similar rejected under rationale. Furthermore, Poole et al discloses a knowledge base storing a plurality of information such as content and rules. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated, it was well known to one of ordinary skill in the art at the time of Applicant's invention that since the database is relational, meaning data is stored in tables, all the content and rules stored in the knowledge base would be stored in tables. In addition, knowledge base stores collection of documents that may be created by Poole, and so, those documents are validate by DTDs, stored in the knowledge base or correspond to the rules of the DTD.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any

changes, updates or amendments to data information in one table of a relation database affects that same information in any other table utilizing it.

As per dependent Claims 16-18, Poole et al discloses a knowledge base that include text components that include SGML text components. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated, Poole et al's knowledge base would act as a object-relational database, wherein it was well-known in the art at the time of Applicant's invention that a object-relational database would contain tables that link to the all of the objects within the database.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any changes, updates or amendments to data information in one table of a relation database affects that same information in any other table utilizing it.

In addition, Poole et al fails to specifically disclose the text fragments are in XML. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transform into another document using a stylesheet. Thus, it would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method Bantz et al, and Bell et al's method with using XML file in place of SGML since it benefit

of being designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

12. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Bantz et al (US PGPub 2003/0163809, published 8/28/2003) in further view of Bell et al (US Patent 7,168,035, filed 6/11/2003) in further view of Moore et al (US Patent 5,630,127, published 5/13/1997)

As per dependent Claims 10-12, Poole et al discloses storing data into the Knowledge Base, but Poole et al, Bantz et al, and Bell et al fails to specify disclose the knowledge base is configured to be loaded by press process and includes a plurality of stored procedures. However, Moore et al discloses storing rules as objects in a relational database. (Abstract, line 2-5; Column 4, lines 52-61; Claim 11)

It would be obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al, Bantz et al, and Bell et al's methods with Moore et al's method since Moore et al's method would have provided the benefit to the user to easily modify existing rules and create new rules.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-3, and 6-18 have been considered but are moot in view of the new ground(s) of rejection.

Arguments address regarding of the new limitations of Claims 18 and 28 brought forth in the amendment of wherein precedence involves identifying two or more matching document components and dynamically choosing one of the matching components has been viewed the new ground of rejection of 35 USC 103(a) under new references using Bell et al.

14. Applicant's arguments filed 15 October 2007 have been fully considered but they are not persuasive.

15. On page 5, under Heading II. Objections to the Drawings, Applicant discloses the Applicant has amended the identified informalities and corrected drawing sheets have been provided with the amendment. However, the Examiner disagrees, since the Examiner did not received the new correct drawing sheets with the recent submitted amendment.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/814,522  
Art Unit: 2178

Page 12

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Faber  
Patient Examiner  
AU 2178

DF

  
CESAR PAULA  
PRIMARY EXAMINER